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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

application of

Confirmation No. 3378

Mitsuaki OSHIMA et al.

Docket No. 2000_1420

Serial No. 09/686,467

Group Art Unit 2634

Filed October 12, 2000

Examiner A. Le

COMMUNICATION SYSTEM

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 THE COMMISSIONER IS AUTHORIZED TO CHARGE ANY DEFICIENCY IN THE FEES FOR THIS PAPER TO DEPOSIT ACCOUNT NO. 23-0975

Sir:

Pursuant to the provisions of 37 CFR 1.56, 1.97 and 1.98, Patentees request consideration of the references listed on attached form PTO-1449 and any additional information identified below in paragraph 3. A legible copy of each reference listed on the Form PTO-1449 is enclosed, except a copy is not provided for:

	IJ	each U.S. Patent and U.S. Patent application publication;						
		each reference previously cited in the international application PCT/; and/or						
		each reference previously cited in prior parent application Serial No.						
		·						
1a.	[X] This Information Disclosure Statement is submitted:							
		within three months of the filing date (or of entry into the National Stage) of the above-entitled application, or						
	before the mailing of a first Office Action on the merits or the mailing of a first Office Action after the filing of an RCE,							
	and thus no certification and/or fee is required.							

1b. [] This Information Disclosure Statement is submitted

after the events of above paragraph 1a and prior to the mailing date of a final Office Action or a Notice of Allowance or an action which otherwise closes prosecution in the application, and thus:

- (1) [] the certification of paragraph 2 below is provided, or
- (2) [] the fee of \$180.00 specified in 37 CFR 1.17(p) is enclosed.
- 1c. [] This Information Disclosure Statement is submitted:

after the mailing date of a final Office Action or Notice of Allowance or action which otherwise closes prosecution in the application, and prior to payment of the issue fee, and thus:

the certification of paragraph 2 below is provided, and

the fee of \$180.00 specified in 37 CFR 1.17(p) is enclosed.

- 2. It is hereby certified
 - a. [] that each item of information contained in this Information Disclosure
 Statement was first cited in any communication from a foreign patent office in a
 counterpart foreign application not more than three months prior to the filing of
 the Statement, or
 - b. [] that no item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the person signing the certification after making reasonable inquiry, was known to any individual designated in §1.56(c) more than three months prior to the filing of the Statement.
- 3. [X] Consideration of the following list of additional information (including any copending or abandoned U.S. application, prior uses and/or sales, etc.) is requested.

In the J.A.C. Bingham reference, pages 9 and 10 are advertising pages and have been omitted.

For each non-English language reference listed on the attached form PTO-1449, reference 4. is made to: a full or partial English language translation submitted herewith, a. [] a foreign patent office search report (in the English language) submitted b. [] herewith, the concise explanation contained in the specification of the present application c. [] at page, the concise explanation set forth in the attached English language abstract, d. [] the concise explanation set forth below or on a separate sheet attached to the e. [] reference: A foreign patent office search report citing one or more of the references is enclosed. 5. Statement Under 37 CFR 1.704(d) 6.

Each item of information contained in the Information Disclosure Statement was first cited in any communication from a foreign Patent Office in a counterpart application, and this communication was not received by any individual designated in §1.56(c) more than thirty days prior to the filing of the Information Disclosure Statement.

Respectfully submitted,

Mitsuaki OSHIMA et al.

Pirev K Ei

Registration No. 41,471 Attorney for Patentees

JRF/fs Washington, D.C. 20006-1021 Telephone (202) 721-8200 Facsimile (202) 721-8250 April 11, 2005

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FORM PTO 1449 (m			ATTY DOCKET NO. 2000_1420 SERIAL NO. 09/686,467				OIPE								
U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE LIST OF REFERENCES CITED BY APPLICANT(S)				APPLICANT Mitsuaki OSHIMA et al. APR 1 1 2005											
(Use several sheets if necessary) Date Submitted to PTO: April 11, 2005							GROUP (5)	BROUP (F)							
U.S. PATENT DOCUMENTS															
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE		NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE							
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	- 1	OTHER	DOCUMENT(S) (I	ncluding Autho	r, Title, Date, Pertinent	Pages, Etc.)	 								
	AO	J. A. C. Bingham, "Multicarrier Modulation for Data Transmission: An Idea Whose Time Has Come", IEEE Communications Magazine, Vol. 28, May 1990, pages 5-8 and 11-14													
_	AP	B. Hirosaki, "An Orthogonally Multiplexed QAM System Using the Discrete Fourier Transform", IEEE Transactions on Communications, Vol. Com-29, No. 7, July 1981, pages 982-989													
	AQ L. J. Cimini, Jr., "Analysis and Simulation of a Digital Mobile Channel Using Orthogonal Frequency Division Multiplexing", IEEE Transactions on Communications, Vol. Com-33, No. 7, July 1985, pages 665-675 and Annex														
EXAMINER					DATE CONSIDERED										